

**Listing and Amendments to the Claims****10/511560****DT04 Rec'd PCT/PTO 15 OCT 2004**

This listing of claims will replace the claims that were published in the PCT Application:

1. (currently amended) A method for supporting multiple diagnostic sessions in a bi-directional communication device, said method comprising:

receiving diagnostic session requests from a plurality of requesters ~~(110, 130)~~;

verifying identification information for each of said requesters ~~(110, 130)~~;

establishing a communications channel for each verified requester;  
and

communicating the requested information to all of said verified requesters via said established communications channels.

2. (currently amended) The method of claim 1, further comprising:

if communication of information to a requester ~~(110, 130)~~ fails, making available, to a subsequent requester, the communications channel associated with the failed communication.

3. (original) The method of claim 1, wherein said identification information comprises a user ID and a password.

4. (original) The method of claim 1, wherein said establishing a communications channel comprises assigning an available socket for communication with each verified requester.

5. (original) The method of claim 4, further comprising rejecting subsequent requests after a total number of available sockets has been assigned.

6. (original) The method of claim 1, wherein said establishing a communications channel further comprises saving session information such as, a requester IP address and a requester receiving port number for each of said verified requesters.

7. (original) The method of claim 6, wherein the requested information is communicated to each of said verified requesters via an available socket comprising the respective saved session information.

8. (currently amended) An apparatus ~~(120)~~ for supporting multiple diagnostic sessions in a bi-directional communication device, said apparatus comprising:

a server ~~(190)~~;

a memory ~~(220)~~ for storing program instructions; and

a processor ~~(210)~~ for executing said instructions to configure the apparatus ~~(120)~~ to perform the steps of:

receiving diagnostic session requests from a plurality of requesters ~~(110, 130)~~;

verifying identification information for each of said requesters ~~(110, 130)~~;

establishing a communications channel for each verified requester;  
and

communicating the requested information to all of said verified requesters via said established communications channels.

9. (currently amended) The apparatus ~~(120)~~ of claim 8, further configured to perform the step of:

if communication of information to a requester ~~(110, 130)~~ fails, making available, to a subsequent requester, the communications channel associated with the failed communication.

10. (currently amended) The apparatus ~~(120)~~ of claim 8, further configured to perform the steps of:

rejecting subsequent requests after a total number of available sockets has been assigned.

11. (currently amended) The apparatus ~~(120)~~ of claim 8, wherein said establishing a communications channel comprises assigning an available socket for communication with each verified requester.

12. (currently amended) The apparatus ~~(120)~~ of claim 11, wherein said assigned sockets comprise a requester IP address and a requester receiving port number.

13. (currently amended) The apparatus ~~(120)~~ of claim 8, wherein said plurality of requesters ~~(110, 130)~~ comprise Telnet clients ~~(170, 180)~~.

14. (currently amended) The apparatus ~~(120)~~ of claim 8, wherein said plurality of requesters ~~(110, 130)~~ are network devices.

15. (currently amended) The apparatus ~~(120)~~ of claim 8, wherein said server ~~(190)~~ comprises:

a web server ~~(222)~~ for enabling communication between a requesting device and a diagnostic engine; and

said diagnostic engine ~~(224)~~ for performing the routines that are specified in each of said requests.

16. (currently amended) The apparatus ~~(120)~~ of claim 8, wherein said apparatus comprises a modem.

17. (currently amended) An apparatus ~~(120)~~ for supporting multiple Telnet sessions, comprising:

means ~~(222)~~ for receiving Telnet session requests from a plurality of requesters ~~(110, 130)~~;

means ~~(224)~~ for verifying identification information for each of said requesters;

means ~~(224)~~ for establishing a communications channel for each verified requester; and

means ~~(222)~~ for communicating the requested information to all of said verified requesters via said established communications channels.

18. (original) Computer-readable medium for storing a set of instructions, wherein when said set of instructions is executed by a processor perform a method comprising:

receiving Telnet session requests from a plurality of requesters;

verifying identification information for each of said requesters;

establishing a communications channel for each verified requester;

and

communicating the requested information to all of said verified requesters via said established communications channels.

19. (currently amended) A network ~~(100)~~ comprising:

at least one subscriber terminal ~~(110)~~ comprising a Telnet client ~~(170)~~ for initiating Telnet session requests;

at least one data servicing system ~~(130)~~ comprising a Telnet client ~~(180)~~ for initiating Telnet session requests; and

a network device ~~(120)~~ comprising:

a Telnet server ~~(190)~~;

a memory ~~(220)~~ for storing program instructions; and  
a processor ~~(210)~~ for executing said instructions to configure  
said network device ~~(120)~~ to perform the steps of:  
receiving Telnet session requests from said at least one  
subscriber terminal and said at least one data servicing system;  
verifying identification information for each of said requesters;  
establishing a communications channel for each verified  
requester; and  
communicating the requested information to all of said verified  
requesters via said established communications channels.

20. (currently amended) The network ~~(100)~~ of claim 19, wherein  
said network device ~~(120)~~ is further configured to perform the step of:  
if communication of information to a requester ~~(110, 130)~~ fails, making  
available, to a subsequent requester, the communications channel  
associated with the failed communication.